



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

THE CENTRAL HIGH SCHOOL OF PHILADELPHIA, 1838-1902.

ON November 22, 1902, the new buildings of the Central High School of Philadelphia were formally dedicated to their noble work. It was an interesting and significant occasion. There were present the president of the United States and five members of his cabinet, senators and ex-senators, governors and ex-governors, educators, scientists, and practically every official of the city and county of Philadelphia. The alumni of the school had gathered from far and near — Maine, Texas, Nebraska, and Tennessee were represented at the class-reunions and other alumni functions. It is safe to say that not a line of human employment was without its exponent in the vast audience that thronged the new assembly hall. It was a notable tribute to the democratic influence of the public school; it was an apotheosis of public education.

Such an occasion renders a review of the history of the school of special timeliness, and lends a present interest to an account of its work and prospects.

The Central High School of Philadelphia was established by the board of school controllers for the First District of Pennsylvania, by virtue of the authority granted by the Pennsylvania legislature in 1836, in a section of the school law of the year which reads :

That the controllers of the public schools for the city and county of Philadelphia be, and they hereby are, authorized, whenever they shall think proper, to establish one central high school for the full education of such pupils of the public schools of the First School District as may possess the requisite qualifications, etc.

At that period the board of school controllers contained several prominent men of unusual public spirit. The president was Thomas Dunlap, Esq., who was actively associated with Nicholas Biddle in the management of the Second Bank of the United States, and among his colleagues may be mentioned George M.

Wharton, George M. Justice, Thomas G. Hollingsworth, and Morton McMichael. These men felt keenly that the earlier attempts at public education in Philadelphia had been based upon principles that were essentially wrong. Under the laws of 1809 and 1818, there had been established schools to which a man might send his children without cost to himself, if he would declare that he was unable to pay for their schooling. As a consequence, the public schools were contemptuously stigmatized "pauper" schools. "Some called them 'ragged schools,' and thousands of high-spirited American citizens, while they craved educational privileges for their children, could not be induced to place them in a 'poor' or 'pauper' school" (Edward Shippen). This theory was abandoned by the laws of 1834 and 1836, which opened the public schools to all, rich and poor alike, and it was felt by the controllers of that day that in no way could the popularity of public education be more readily insured than by providing a complete system of higher education, as thorough in its training and as broad in its culture, as could be secured under private auspices. A letter written in 1867 by John S. Hart, whose work as a teacher was long identified with this school, well summarizes the reforms of this epoch ;

During this period the schools were changed from *pauper* schools to common schools, intended to be open to all, and adequate to the wants of all ; the idea of teaching by unpaid monitors taken from the schools themselves (Lancaster's plan) was abandoned, and paid assistant teachers were substituted ; the plan of employing *very largely* female teachers instead of male teachers was introduced. The schools were classified so as to form a regular gradation and subordination of duties and studies ; and lastly the Central High School was established, as the crowning glory of the whole, the worthy apex to a noble pyramid.

This, then, was the main function of the school ; it was to be the culmination of the system of public education, so that its stimulating effect might be felt in the lower schools in every section of the city. There were other and equally definite purposes to be served. The public-school system had just been established, and there was a prime need for an educated teachership to take up the work in the class-rooms. Philadelphia county, prior to consolidation in 1854, contained many schools

under a variety of local boards ; and while a general authority was vested in the central board, yet it was felt that in no way could unity in work and efficiency in administration be better maintained than by providing a common goal toward which the graduates of the elementary schools might turn. To enter the high school, a uniform test by examination must be provided which would become an effective measure of the work in the lower schools.

It was not expected that the cost for this school, which of necessity would be far in excess of the per capita cost of elementary education, would be borne exclusively by the county concerned. In 1836 Congress had passed an act providing for the distribution of the surplus revenue of the national government to the states. The legislature of Pennsylvania had decided that the share of that commonwealth should be devoted to education, and this extra income was confidently relied upon to meet the cost of higher public education in Philadelphia. Of the amount that was apportioned to the city, over \$72,000 was used in the purchase of a site and the construction of the original building. When this source of supply ran dry, as it did after the panic of 1837, the school had been established, and on broad and generous lines ; and while there were several political attacks on the ground of waste and extravagance, the instant popularity of the institution enabled it to survive.

The first building for the Central High School was erected in 1837-8, on a site on Juniper street, fronting Penn square, and today included in the limits of the Wanamaker store. A faculty of four members was appointed : Enoch C. Wines, A.M., was acting principal and professor of ancient languages ; John Frost, LL.D., taught English and history ; in the department embracing mathematics, astronomy, natural philosophy, and chemistry, there were elected Joseph Wharton, LL.D., and E. Otis Kendall, A.M. Mr. Wharton died soon after his election, and in his place was appointed Professor William Vogdes.

The school was opened October 26, 1838, when a class of sixty-three was admitted. At first there was little cohesion in the organization and the curriculum. But in its second year,

Alexander Dallas Bache,¹ LL.D., president-elect of Girard College, tendered his services to the board of school controllers, until the completion of the buildings at Girard College and the settlement of the litigation over Girard's will should enable him to commence his work with that institution. Dr. Bache was at once appointed principal of the high school, and under his active and capable management a thorough organization was effected. Three courses of study were arranged: (1) the elementary course of two years, designed for pupils who enter business early in life; in this course English and science were accented, but no foreign languages were taught; (2) the principal course of four years, including English, French and English history and Geography, lower mathematics (arithmetic, algebra, geometry, and trigonometry), higher mathematics (analytical and descriptive geometry), mechanical and natural philosophy, natural history, mental and political science, and writing and drawing; (3) the classical course of four years, in which Latin, Greek, and French were taught, but with less mathematics and science than in the principal course. It will be noticed that this course of study was strong on the side of science and mathematics, and these tendencies have remained constant down to the present day. President Bache's ideal was formed by his West Point experience; his ambition was to make a school strong along practical lines. He realized clearly that for most of the students the high-school course would conclude their formal education, so he enriched the curriculum by the addition of subjects which prior to his time had been found only in collegiate courses.

¹ Alexander Dallas Bache, LL.D., was the great-grandson of Benjamin Franklin, and born in Philadelphia in 1806, and died in Newport, 1867. He was graduated from the United States Military Academy in 1825, and was afterward professor in its faculty. From 1828 to 1836, and from 1842 to 1843, he was professor of natural philosophy and chemistry in the University of Pennsylvania. From 1836 to 1842 he was president of Girard College, and during part of this time he was principal of the Central High School and superintendent of schools in Philadelphia. From 1843 to 1867 he was superintendent of the United States Coast Survey, during which time he was president of the American Philosophical Society, president of the American Association for Advancement of Science, president of the National Academy of Sciences, etc., etc.

A unique feature of the school's scientific work is to be found in the interest which has always been shown in astronomy. In 1838, through the suggestion of the American Philosophical Society, an astronomical observatory was established in connection with the Central High School, and the dome was placed on a tower in the rear of the school building. This is the fourth oldest astronomical observatory in America, being preceded by the observatories at Yale, Williams, and Western Reserve Colleges. Under the leadership of Sears C. Walker, the eminent astronomer, the board of school controllers imported the equipment from Germany, and the Fraunhofer equatorial and the Ertel meridian circle were the first German-made instruments to be imported into America for scientific work. The character of this equipment, together with the work of Bache, Walker, and Kendall, caused Professor Elias Loomis, of Yale, to write that "the erection of this observatory formed an epoch in the history of American astronomy."

In 1842 Dr. Bache was succeeded by Professor John S. Hart,¹ who was principal of the Central High School until 1858. His personal influence upon the school and its pupils was very marked, and his memory is cherished most dearly by the alumni of that period. Thoroughly devoted to the school, and with a keen appreciation of its problems, he bent all the energies of a powerful mind toward strengthening its position in the community. At regular intervals, charges of extravagance, etc., were brought against the controllers, and several attempts were made to abolish the higher schools. But by an assiduous cultivation of the press, and by the introduction of open examinations and other public features into the school's work, Professor Hart won friends for the school, until the number of alumni was sufficient to insure for the school that organized support which

¹John Seely Hart was born in Massachusetts in 1810, and died in Philadelphia in 1877. He was graduated at Princeton in 1830, and was later tutor at Princeton and Natchez, adjunct professor of ancient languages at Princeton, principal of Edgehill School; from 1842 to 1858, principal of the Central High School; from 1863 to 1871, principal of the New Jersey State Normal School; and from 1872 to 1874, professor of rhetoric and of the English language at Princeton. He was the author of many educational texts and other works.

it has never lacked since these early days. The faculty of this period included Dr. Henry McMurtrie, Rembrandt Peale, John Sanderson, James C. Booth (who was the first American student in analytical chemistry to venture into Germany), John F. Frazer, Francis A. Bregy, Henry Haverstick, George J. Becker, James Rhoads, Martin H. Boyé, James A. Kirkpatrick, Zephaniah Hopper, and James McClune. Educationally, there were several changes in the development of the curriculum. Phonography, then in its infant stage as a science, was introduced, and some of the students of this time became the official reporters of the debates in the United States Congress. Anglo-Saxon and German were added to the list of languages; it is believed that the former was taught in the high school before it had won a place in any other collegiate course, except those of Harvard and the University of Virginia.

As the school system developed, elementary subjects, such as mensuration, United States history, etc., were passed down to the grammar school. This made it possible to extend the course of study, and in 1849 the school was reorganized as a college, the authority to confer degrees being granted by an act of the legislature of September 11, 1849. There can be little question but that at this time the course of study was on a par with that of many colleges; it was unusually strong in the scientific and mathematical fields. For many years the high character of the faculty and the general success of the alumni of the school won for it universal recognition as an institution of collegiate rank. Within the last fifteen years, however, there has been a great expansion in higher institutions of learning, and this advance has led to larger demands upon all institutions conferring academic degrees. Philadelphia has met this movement, in part, by adding two years to the grammar course, so that today the higher education is based on an eight-year elementary course. But this has not been sufficient to place the Central High School abreast of the collegiate departments of the advanced universities. It was the recognition of this fact that led to the recent proposition to add two years to the high-school course, thus making a six-year course a requisite for the collegiate degree.

In 1854 the site of the school was moved to the southeast corner of Broad and Green streets, where a new building was erected, so complete in its equipment and in its sanitary appliances as to be styled by some critics of that time "the most perfect school building in America." In the same year the classical course was abandoned, largely as a result of the Native-American agitation of the time, and there was a curtailment of all language study.

Four years later Dr. Hart resigned after a most successful régime, and was succeeded by Nicholas H. Maguire, A. M.,¹ whose work in the elementary schools warranted the confident expectation of success in the high school. But the eight years of Professor Macguire's administration included the stormy period of the Civil War, when partisan feeling was exceedingly bitter, and when political influence was felt even in the government of the schools. Professor Maguire was a kindly man, whose memory is lovingly cherished by the alumni of his period; but with the conclusion of the Civil War, it was deemed wise to reorganize the faculty, and so in 1866 he and several of his colleagues retired.

The new principal was George Inman Riché, A. M.,² an alumnus of the school and an executive of rare talent. His administration lasted until 1886, over nineteen years, and is the longest in the history of the school. There were few changes in the curriculum during this time, but the school was well conducted, and the influence of the personality of the principal counted for good. The best work of this period was done in the scientific laboratories, where Professor Edwin J. Houston and Professor Elihu Thomson perfected those discoveries (Thomson-Houston)

¹Nicholas Harper Maguire, A. M., was born in Burlington in 1814, and died in Philadelphia in 1899. He was graduated from St. Mary's College in 1833, and thenceforward taught in public and private schools in this vicinity. After retiring from the principalship of the Central High School in 1866, he re-entered elementary school work.

²George Inman Riché, A. M., was born in Philadelphia in 1833, and is now living in Galveston, Tex. He was graduated from the Central High School in 1851, and afterward was admitted to the practice of law. His entire career in educational work was spent in the twenty years of his principalship of the Central High School.

that have made their names world-famous in electrical science. A chemical laboratory was fitted for the use of students.

In 1886 Professor Riché resigned and was succeeded by Franklin Taylor, M.D.,¹ a cousin of Bayard Taylor, who held the principalship for two years. During the interim, before Dr. Taylor's successor was chosen, Professor Zephaniah Hopper,² senior member of the faculty, served as president *pro tempore*. In 1888 Henry Clark Johnson³ was elected president, and with this administration the modernization of the school commences. The curriculum was broadened by the restoration of the classical course and by the introduction of new subjects, and these were arranged in six courses, open to the election of the student. The faculty was strengthened by the introduction of younger men of university training and thoroughly in touch with modern educational methods. As a result, the popularity of the school increased greatly, and the numbers in attendance rendered it necessary that portions of several buildings in the neighborhood should be used for school purposes. This led to a demand for new and modernized buildings, and an agitation was commenced in the board of public education and by the alumni of the school, which has just resulted in an abundant fulfilment.

In December, 1893, President Johnson resigned, and, after a vacancy of several months, the position was filled by the election of

¹ Franklin Taylor, M.D., was born in Kennett Square, Pa., in 1818 and died in Philadelphia in 1890. He studied at Harvard University and at Heidelberg. He held many public positions in his native state and was at various times, superintendent of schools of Chester county, professor in the West Chester Normal School, professor of English literature in the Central High School, and from 1886 to 1888 president of the school.

² Zephaniah Hopper, A.M., Ph.D., was born in Philadelphia in 1824 and is today the senior member of the faculty of the Central High School as well as its oldest alumnus. He was graduated in 1842 with the first class, and has held a chair in the mathematical department of the school since 1854. From 1887 to 1888, and in 1894, he served as acting president of the school.

³ Henry Clark Johnson, A.M., LL.B., was born in Homer, N. Y., in 1851, and is now practicing law in New York city. He was graduated from Cornell in 1873, and studied at the Yale Law School. At various times he was headmaster of the Ury School, principal of the City High and Normal Schools at Paterson, professor of Latin at Lehigh University, and from 1888 to 1893 he was president of the Central High School.

Professor Robert Ellis Thompson,¹ whose long service at the University of Pennsylvania had introduced him most favorably to the scholarly circles of the land. During the nine years of President Thompson's administration that have elapsed, much has been accomplished. The new buildings have been erected and equipped, with a completeness that springs from a popular appreciation of the value of school to the community. The teaching force has been organized in nine departments, with one of the older professors in charge of each, viz : ancient and modern languages, mathematics, literature, history, biology, physical science, art, commerce, and pedagogy. The course of study has been broadened by the judicious introduction of electives. The standard of the faculty has been raised by the appointment of men of modern university training. Today the Central High School includes in its working force fifty-seven professors and instructors, and there are 1,382 students in the school proper ; 16 students in the graduate course in pedagogy, and 60 pupils in the school of practice.

The course of study is characterized by the breadth and variety of the subjects of instruction. The curriculum is in marked contrast to that of a college preparatory school of the average grade. The tradition of the school and the necessities of its pupils indicated that for the large majority graduation from the high school would mark the completion of their general education. Until 1889, therefore, no attempt was made to prepare pupils for the arts courses of the more exacting universities, and all the pupils of the school pursued one course of study, designed to prepare them for the active duties of life and also well fitted to serve as a foundation for a technical or professional course. In the last ten years, however, there has been a great change in the curriculum, which is now characterized by great freedom in election. Today there is instruction given in six languages, viz : English, Latin, Greek, French, German, and Spanish, and in other fields the course is as widely varied.

The curriculum, as at present arranged, presents five courses of study open to the choice of students : (1) The classical course, which

¹Robert Ellis Thompson, A.M., S.T.D., was born in Ireland in 1844. He was graduated from the University of Pennsylvania in 1865, and later from the Reformed Presbyterian Theological Seminary. He was elected to various chairs in the University of Pennsylvania, and from 1884 to 1892 he was John Welsh professor of history and English literature in that institution. Since 1894 he has been president and professor of ethical and political science in the Central High School. He is the author of *Social Science and National Economy*, *The Divine Order of Human Society*, *Protection to Home Industry*, etc., etc.

covers instruction in Latin, Greek, French or German, English, mathematics, astronomy, physics, chemistry, history, drawing, biology, ethics, and political economy. (2) The Latin-scientific course differs from the classical in that Greek is omitted, and more extended instruction is given in the modern languages, mathematics, and sciences. Both of these courses lead to the degree of bachelor of arts. (3) The scientific course contains no Greek, and Latin is omitted after the sophomore year, and fuller instruction is given in French and German. It leads to the degree of bachelor of science. (4) The course in commerce was inaugurated in September, 1898. It has a four years' course of study, embracing the subjects usually taught in secondary schools, but accenting the modern languages, and with the addition of special subjects in economics, science, and business technique. (5) The graduate school of pedagogy offers a two years' course of study, designed primarily for those who wish to fit themselves for teaching in the elementary schools. The curriculum is made up of professional and scholastic studies. A school of practice is conducted in connection with this course.

Perhaps the most obvious criticism upon the course of study lies in the fact that so many subjects are treated that it gives rise to the impression that instruction is of necessity superficial and pretentious, rather than thorough. That there is justification for this comment is evident, but it must be remembered that the curriculum is now in a transition stage, old subjects and new are struggling for place and time. It is probable that in a few years there will be a more logical balance, which will result in decreasing the number of subjects taught in any one year, and hence will add to the thoroughness of the instruction.

In a large city school, where there is an enthusiastic body of resident alumni, the undergraduate life may be developed to an unusual degree. Especially is this the case when the lad enters the school which has been attended by his father, and may be by his grandfather. The Central High School is now giving instruction, in several cases, to its third generation. As a natural result, a series of healthy traditions have been developed, which find their expression in a great variety of student associations. There are numerous social clubs, Greek-letter societies, debating unions, etc. In the decade before the Civil War a group of debating unions formed a literary congress,

which arranged elaborate lecture courses from the most eminent Americans in the lyceum work, thus stimulating to a marked degree the intellectual pulse of the city. As early as 1847 there were school papers and class papers published in the school, and their editors have turned in many cases to professional journalism. George Alfred Townsend ("Gath"), the well-known correspondent, sent his first poem to the *High School Journal*. The school organ of the present is the *Mirror*, formed in 1885, which is edited by a committee of the senior class. Perhaps the most interesting of the undergraduate activities, along non-athletic lines, is the Central High School House of Representatives, which was organized five years ago, for the purpose of affording an opportunity for the discussion of current topics, and also for the study of parliamentary procedure.

The athletic activities are manifold, and with the opening of the new gymnasium the way is now open for a formal organization such as could not have been attempted in previous years. The school maintains a football, baseball, basket-ball, cricket, and track teams and a crew. It is safe to assert that over three hundred students are directly interested in some of these varied exercises. During the winter season, when the first practice for the crew has been commenced on the rowing machines, seventy and eighty students have responded to the call. The entire management of all athletic exercises is under the control of an athletic council, consisting of three members of the faculty, four alumni, and seven undergraduates, five being captains of the most important school teams, and two elected at large annually from the entire student body.

It is worthy of comment that this council, which is the first administrative agency in the school's history in which faculty, alumni, and students have been jointly represented, has worked with great success. With the hearty co-operation of the students, rules of eligibility excluding from the teams students who are not keeping up with the work of the school, etc., have been framed and enforced. It has also insured stability and system in the business management. A large athletic field has been rented in co-operation with another association, and with the

completion of the gymnasium in the annex of the new buildings the physical life of the students should be well cared for. While the policy of the school does not overemphasize this aspect of undergraduate life, yet in the development of a healthy *esprit de corps* among the students no agency has been more effective. In the recent years, when the expansion has been exceedingly rapid, it has been through attendance upon school games that the students of the various classes have learned to know each other. This is the greatest justification for their organized sport.

In the sixty-five years since its establishment the Central High School has admitted 19,115 young men. Of this number, 3,328 have been graduated from its full four years' course, and about 2,500 more have received partial course certificates. Its alumni are to be found in every walk in life—useful and upright citizens, and loyal to the public-school system that has given them their training for life. Among them may be mentioned Hon. Robert E. Pattison, twice governor of Pennsylvania; Hon. Charles F. Manderson, ex-senator from Nebraska; Hon. Leon Abbett, governor of New Jersey; Hon. Elwood Evans, lieutenant-governor of Washington; Hon. Lewis C. Cassidy, attorney-general of Pennsylvania; Hon. James T. Mitchell, justice of the supreme court of Pennsylvania; Hon. Edward Patterson, judge of the supreme court of New York; Hon. Dominick I. Murphy, United States commissioner of pensions; Hon. Samuel S. Fisher, United States commissioner of patents; Hon. Ignatius Donnelly, Populist candidate for the vice-presidency in 1900; Henry George, founder of "the single tax;" Frank R. Stockton, the novelist; George Alfred Townsend ("Gath"); Rev. Dr. William Elliott Griffis, educator and historian; J. McLure Hamilton, the artist; Dr. Edwin J. Houston and Elihu Thomson, the electricians; Professor Henry D. Hubbard and Professor Charles N. Zueblin, of the University of Chicago; President Thomas M. Drown, of Lehigh University; Dr. W. W. Keen, late president of the American Medical Association; John G. Johnson, Esq.; Captain John P. Green, first vice-president of Pennsylvania railroad; John R. Fanshawe,

Secretary of Lehigh Valley Railroad; Clement A. Griscom, president of the shipping trust; P. A. B. Widener and Charles T. Yerkes, traction magnates; Charles H. Cramp, head of the famous shipbuilding company; four members of the firm of Baldwin Locomotive Works; Thomas Dolan, General James W. Latta, General Robert P. Dechert, Rear-Admiral James M. Forsyth, etc.

These names, which might be supplemented with others of equal distinction, are the best exposition of the character of the training given by the Central High School, and furnish the most satisfactory justification for the system of public education which has yielded so bountiful results.

Such is the record of the great American public school !

FRANKLIN SPENCER EDMONDS.

CENTRAL HIGH SCHOOL,
Philadelphia.

APPENDIX.

I. COURSE OF STUDY, 1882 (HART).

The enumeration at the tops of the columns indicates the departments of study in the schools; the numbers in parenthesis following each course indicate the number of periods of study per week.

	1	2	3	4	5	6	7	8	9	10	11
H. JUNIOR YEAR.	The Latin element of the English language (5).	Algebra (2); geometry (2); arithmetic and mensura. (3)	Physics (5).		Phonography (5); book-keeping (5).	Composition (1).		History of England (2).	French (grammar) (5).	For Students of Classical Course.	For Students of English or Elementary Course.
G. FRESHMAN YEAR.	The Latin element of the English language (5).	Algebra (3); geometry (3).	Anatomy and physiology (4).	Drawing (2) and penmanship (1).	Phonography (3); book-keeping (4).	Composition (1); English grammar. (1).		History of Greece (3).	French (grammar and reading) (5).	Latin lessons (5).	Natural philosophy (5).
F. SOPHOMORE YEAR.	The Saxon element of the English language; Saxon grammar (5); Saxon gospels (5).	Algebra (4); plane trigonometry (3).	Anatomy and physiology (3).	Drawing (2) and penmanship (1).	Moral Science (3).	Composition (1).	Natural philosophy and chemistry (3).	History of Rome (3); history of Pennsylvania (2).	French (reading and grammar) (5).	Cesar (5).	Chemistry (5).
D. JUNIOR YEAR.	History of English language and lit. and Anglo-Saxon. (5)	Analytical geometry (3); surveying (4).	Anatomy and physiology (3).	Drawing and penmanship (1).	Mental philosophy (3).	Composition (1); rhetoric (2).	Nat. philosophy and chemistry (3).	Universal history (3); history of Penna. (2).	French (grammar) (5).	Virgil (5).	Geography of Pennsylvania (5).
C. JUNIOR YEAR.	History of English language and literature and Anglo-Saxon (5).	Analytical geometry (3); surveying (4).	Anatomy and physiology (4).	Drawing and penmanship (1).	Mental philosophy (3).	Composition (1); rhetoric (2).	Nat. philosophy and chemistry (3).		Spanish (<i>Gil Blas</i> and grammar) (3); French (2).	Greek grammar (3); Sallust (2).	
B. SENIOR YEAR.	History of English language and literature and Anglo-Saxon (5).	Astronomy (2); differential calculus spherical triangles (2).	Medicine and surgery (4).	Drawing (2) and penmanship (1).	Political economy (2).	Composition (1); elocution (1); logic (2).	Natural philosophy and chemistry (6).		Spanish (<i>Gil Blas</i> and grammar) (3); French (2); Cicero's (<i>Orations</i> scientific reading) (2).	Greek grammar (3); Xenophon's (<i>Cyropaedia</i> (3); Horace (2).	
A. SENIOR YEAR.	History of English language and literature and Anglo-Saxon (5).	Astronomy (4); navigation (4).	Hygiene and zoology (4).	Drawing and penmanship (1).	Political economy (3).	Composition (1); elocution (1); logic (2).	Nat. philosophy and chemistry (3).		Spanish (<i>Don Quixote</i> (3); French (<i>Tupper's Proverbial Philosophy</i>) (2).		

II. COURSE OF STUDY, 1880 (RICHÉ)

FRESHMAN YEAR.	H.	Composition ; English literature.	Algebra; geometry.		History.	German.	Natural history; physical geography.	Higher arithmetic.	Drawing.
	G.	Composition ; English literature.	Algebra; geometry.		History.	German.	Natural history; physical geography.	Higher arithmetic.	Drawing.
SOPHOMORE YEAR.	F.	Composition ; elocution.	Trigonometry ; algebra ; geometry.	Latin.	Political economy; history.	German.	Physics.	Mensuration.	Drawing.
	E.	Composition ; elocution.	Trigonometry ; geometry.	Latin.	Political economy; history.	German.	Physics.	Mensuration.	Drawing.
JUNIOR YEAR.	D.	Composition ; elocution ; English literature.	Trigonometry ; geometry.	Latin.	Political economy.		Physics ; chemistry.	Anatomy ; physiology.	Drawing.
	C.	Rhetoric ; composition ; elocution ; English literature.	Analytical geometry.	Latin.	Political economy.		Physics ; chemistry.	Anatomy ; physiology.	Drawing.
SENIOR YEAR.	B.	Logic ; composition ; elocution ; English literature.	Uranography ; Calculus.	Latin.	Mental science.		Physics ; chemistry.	Anatomy ; physiology.	Drawing.
	A.	Logic ; composition ; elocution ; English literature.	Astronomy.	Latin.	Mental science.		Physics ; chemistry.	Anatomy ; physiology.	Drawing.

III. COURSE OF STUDY, 1900 (THOMPSON).

	Classical Course.	Latin Scientific Course.	Modern Language Course.	Course in Commerce.
FRESHMAN YEAR.	Latin (5); American literature (2); history (Greece and Rome) (3); algebra (5); science (physical geography, botany, and zoology) (3); drawing (2).	Latin (5); American literature (2); history (Greece and Rome) (3); algebra (5); science (physical geography, botany, and zoology) (3); drawing (2).	Latin (5); American literature (2); history (Greece and Rome) (3); algebra (5); science (physical geography, botany, and zoology) (3); drawing (2).	Latin (4); English (composition and American literature) (2); algebra (5); history (Greece and Rome) (3); science (raw materials of commerce) (4); Philadelphia (history, government, business interests) (2); business forms and penmanship (2).
SOPHOMORE YEAR.	Cæsar (3); Latin composition (1); Greek (4); English literature (2); history (England) (2); geometry and trigonometry (5); physical science (3); drawing (2); elocution (1).	Latin (3); German (3); English literature (2); history (England) (2); geometry and trigonometry (5); physical science (3); drawing (2); elocution (1).	Latin (3); German (3); English literature (2); history (England) (2); geometry and trigonometry (5); physical science (2); drawing (2); elocution (1).	German (5); English literature (3); elementary geometry, trigonometry, and commercial arithmetic (5); history (England) (2); commercial geography (3); bookkeeping (3); stenography and typewriting (4).
JUNIOR YEAR.	Latin (4); Greek (4); English literature (2); history (U. S.) (2); mechanics and algebra (3½); chemistry (2½); physics (2); anatomy and physiology (2); composition (1).	Latin (3); German (3); English literature (2); history (U. S.) (2); mechanics and algebra (4½); chemistry (2½); physics (2); anatomy and physiology (2); composition (1).	German (2); French (3); English literature (2); history (U. S.) (2); mechanics and algebra (4½); chemistry (2½); physics (2); anatomy and physiology (2); logic (2); drawing (1); composition (1).	German (3); English literature (2); history (U. S.) (2); physics and chemistry (4); political economy (2); observation of business methods (2) stenography (4); elocution (1); French or Spanish (4).
SENIOR* YEAR.	Latin (4); Greek (4); English philology (1); Shakespeare (1); Elizabethan drama (1); astronomy (2); ethics (1); political economy (1); French or German (3); mathematical review or architectural drawing (2); electives (see below) (2).	Latin (3); English philology (1); Shakespeare (1); Elizabethan drama (1); mathematics (4); astronomy (2); spherical trigonometry and analytical geometry (2); chemistry (2); physics (2); geology (2); ethics (1); political economy (1); drawing (1); French or general electives (see below) (2).	German (2); French (3); English composition (1); Elizabethan drama (1); astronomy (2); spherical trigonometry and analytical geometry (3); chemistry (2); physics (2); geology (2); ethics (1); political economy (1); drawing (1); electives (see below) (2).	German (3); English literature (3); modern industrial and commercial history (U. S. and England) (3); industrial chemistry (2); economics and political science (8); commercial law (2); French or Spanish (3).

* Some of the one-hour courses of the senior year are given two hours in a single term.

ELECTIVE COURSES FOR SENIORS.

Latin (Livy, Terence).
Greek (Herodotus, Plato, Aristophanes).
Anatomy and Physiology (advanced).
Civil engineering.
Mechanical engineering.
Calculus.
Chemistry.

Physics.
Drawing.
Politics.
Constitutional history.
Nineteenth Century literature (Browning, Tennyson, Arnold).

COURSE IN PEDAGOGY.

(Two-Years' Post-Graduate Course.)

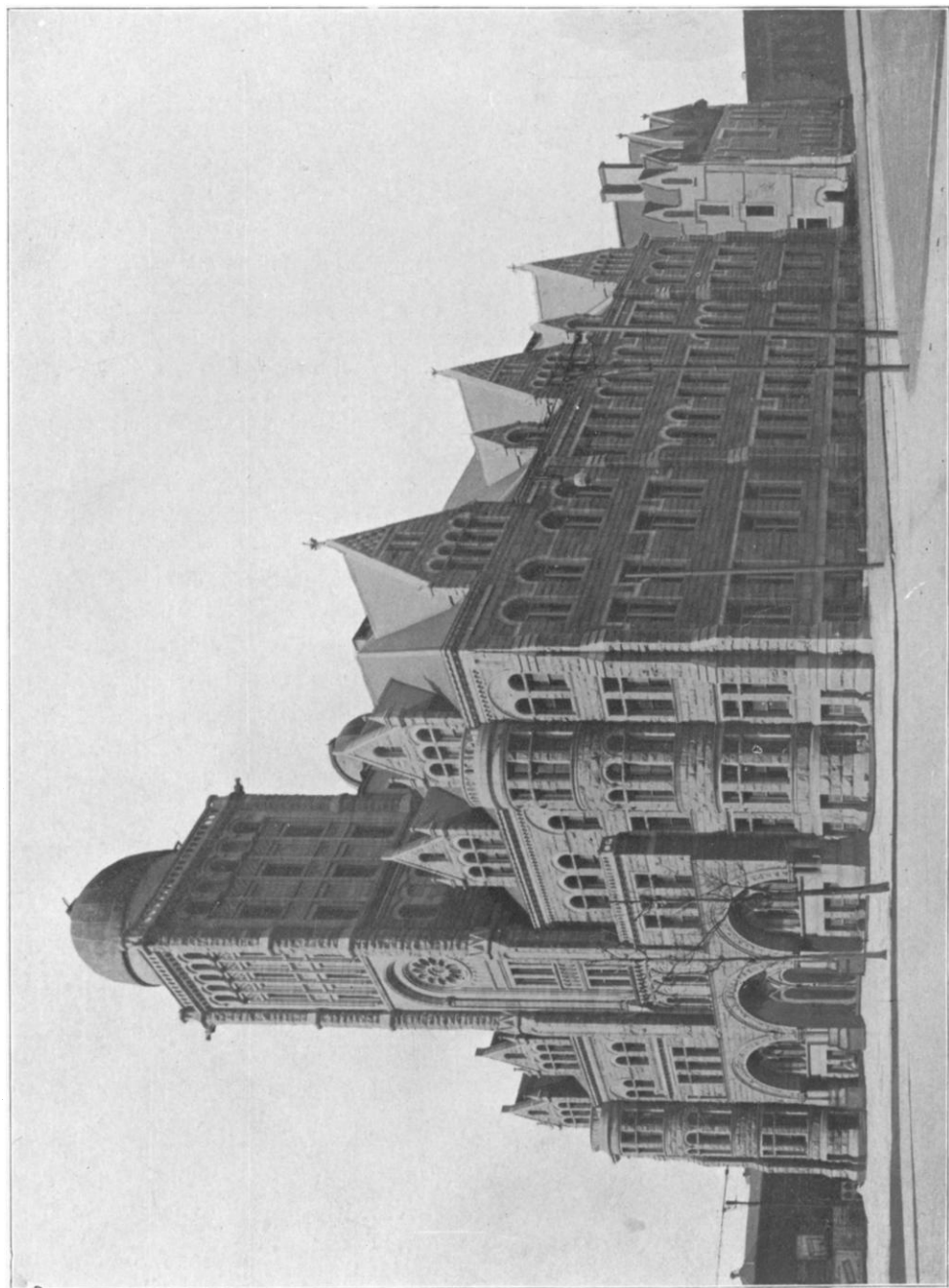
FIRST YEAR.

- A. Professional.**
History of education (2).
General pedagogical theory (3).
Psychology (3).
Logic (second term 1½) (3).
Historical psychology (second term 3) (1½).
School law (1).
- B. Scholastic.**
Biology (4).
English composition (3).
Public speaking (1).
Vocal music (1).

SECOND YEAR.

- A1 Professional**
Sociology and ethics (2).
Philosophy of education (1).
Psychology (3).
Observation work, conference (2).
Practice teaching (2). (Six weeks' teaching in school of practice.)
- B. Scholastic..**
Arithmetic, mensuration, geometry, and algebra (3).
United States history, civil government, and political geography (3).
English (3).
Reading and public speaking (1).
Drawing (2).
Vocal music (1).

[To be continued.]



CENTRAL HIGH SCHOOL, PHILADELPHIA, PA.